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# Compromising the Principles of War: Technological Advancements Impact Multinational Military Operations

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Coalition and multinational military operations are inherently complicated from a command and control (C2) perspective. As the United States endeavors to conduct future military operations in the form of a coalition, Unity of Command, a traditional Principle of War, is receiving less emphasis in joint doctrine. The short-term nature of a coalition is not conducive to establishing a long-term solution to chain-of-command relationships. Current U.S. joint doctrine directs military commanders to abandon unity of command in favor of focussing on a more robust unity of effort and, on at least one occasion, issues conflicting guidance.

By placing greater emphasis on unity of effort and subverting vital chain of command issues, a future multinational military force is liable to experience more problems with interoperability due to rapidly advancing technology. Network-Centric warfare and the Digitized Battlefield concept are two revolutions in military affairs (RMA) systems that threaten future coalition C2 through isolation. The U.S. military must take the lead on standardizing C2 system development to ensure compatibility and interoperability issues are addressed. The inability of coalition forces to share vital intelligence information, tactical locating data, and coordinate maneuver is damaging to achieving unity of effort and does not promote consensus planning.

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## Abstract

Coalition and multinational military operations are inherently complicated from a command and control (C2) perspective. As the United States endeavors to conduct future military operations in the form of a coalition, Unity of Command, a traditional Principle of War, is receiving less emphasis in joint doctrine. The short-term nature of a coalition is not conducive to establishing a long-term solution to chain-of-command relationships. Current U.S. joint doctrine directs military commanders to abandon unity of command in favor of focussing on a more robust unity of effort and, on at least one occasion, issues conflicting guidance.

By placing greater emphasis on unity of effort and subverting vital chain of command issues, a future multinational military force is liable to experience more problems with interoperability due to rapidly advancing technology. Network-Centric warfare and the Digitized Battlefield concept are two revolutions in military affairs (RMA) systems that threaten future coalition C2 through isolation. The U.S. military must take the lead on standardizing C2 system development to ensure compatibility and interoperability issues are addressed. The inability of coalition forces to share vital intelligence information, tactical locating data, and coordinate maneuver is damaging to achieving unity of effort and does not promote consensus planning.

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# Introduction

The United States is likely to engage in all future military operations as a member of a multinational force. The United States "*National Security Strategy* states that U.S. forces will operate multinationally -- when possible -- to promote regional stability throughout the world."[1] The United States often shares common security interests with other 'like-minded' nations; these partnerships are fundamental to building a strong coalition. A coalition strategy enhances international legitimacy of action, promotes military cooperation, and supports "...building security relationships today in an effort to keep these countries from becoming adversaries tomorrow."[2]

From an operational planning perspective, the Principle of War most adversely affected by a lack of synchronization,[3] amongst multinational military forces is unity of effort. In multinational military operations, national political policy may inhibit attaining a command structure indicative of unity of command, however, the requirement remains paramount. History has shown that establishing a C2 structure where a single commander executes command authority over forces assigned, is essential in every conceivable type of military operation, from MOOTW to war. When faced with a formidable threat or unanticipated enemy actions, no measure of combined effort can replace the strength of a coordinated synergistic response derived and directed by a single commander executing command authority.

Section One discusses options for structuring a viable and effective chain of command with the resources and will necessary to properly plan and carry out a major military operation. Unity of command is the U.S. Principle of War that has, during recent multinational military operations, been an area of contention. "Unity of Command means

that all forces operate under a **single commander** with the requisite authority to **direct all forces employed** in pursuit of a common purpose."[4] "Unity of effort...requires coordination and cooperation among all forces toward a commonly recognized objective, although they are not necessarily part of the same command structure."[5]

Secondly, Unity of Effort on the battlefield enhances a military force capability to communicate effectively, exchange vital information and coordinate tactical action.

"The importance of unity of effort will not diminish in the anticipated environment of the 21st century. To the contrary, it will require more attention at the strategic level because of the increased likelihood of multilateral actions, Information Age technologies that will facilitate increased interaction between governments and organizations, and increased global interdependence that will make it more difficult for a coalition to act in unison without straining important relations with nations outside the coalition. Conversely, a dramatically reduced overseas U.S. presence may drive the United States to increasing reliance on unilateral operations where unity of command is easier to achieve. The fact that countries and societies will adapt unevenly to the Information Age will further confound establishing and maintaining unity of effort"[6]

A multinational force (MNF) conducting a military operation exhibits numerous C2 challenges for the planners and executors of that operation. As the size of the military shrinks, a greater reliance is placed on new technologies to bridge the gap of manpower to sensor-weapon. The term Multinational Force (MNF) will be used to qualify all military forces, both coalition and alliance.

Coalition warfare is not a new type of military operation; the U.S. military has fought every major war since World War I as a leader or member of a MNF. By compromising the requirement to establish a viable command structure where unity of command is assured, in favor of reaching consensus through a less demanding unity of effort, commanders overlook some vital tenants of C2 that could adversely affect a military operation. Unity of effort can not be fully achieved during a MNF operation because today's technology and tomorrow's advancements in C2 are not adequately addressing the need of assigned forces to be

interoperable. The purpose and intent of this paper is to discuss and provide a possible solution to some inherent C2 challenges that commanders and planning staffs face during MNF military operations.

## Unity of Command

*"Allied commands depend on mutual confidence. How is mutual confidence developed? You don't command it...By development of common understanding of the problems, by approaching these things on the widest possible basis with respect to each other's opinions, and above all, through the development of friendships, this confidence is "gained in families and in Allied Staffs."*

***-- General of the Army, Dwight D. Eisenhower***

Establishing command relationships in a MNF military operation is a challenge. The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective. A coalition is defined as an ad hoc assembly of nations formed for a common purpose without necessarily common goals, whereas an alliance is a result of formal agreement by two or more nations for broad, long-term objectives which further the common interests of the members.[7] Although unity of command is one of the most important principles of war, it is highly unlikely that due to national pride, trust, or prestige, nations will be willing to subordinate their forces entirely to a single commander of another coalition member. "The command relationships usually evolve as a coalition develops. Coalitions are most often characterized by one of three basic structures:"[8]

(1) All forces are subordinate to the national military organization providing the preponderance of the forces. This is the so-called Lead Nation Command.
(2) Coalition nations retain direct control of their deployed forces leading to Parallel Command.
(3) Lead Nation and Parallel Command structures exist simultaneously or Combination Command.[9]

Typically the Lead Nation command structure will develop during an operation where a particular nation has the greatest stake in an operation. An example was the March 1997 Italian led MNF conscripted to stem the flow of Albanian refugees across the Adriatic and onto their shores. Even in a 'Lead Nation' structure, subordinate U.S. forces are required by title 10 United States Code section 164, to retain Combatant Command (command authority) with national military commanders, typically the Commander-in-Chief (CINC), service or Joint Force Commander. Amongst NATO, and certainly within a coalition, all nations to some degree are guided by political restrictions and, as long as national intervention does not impede the progress of military operations this arrangement may be acceptable. In coalition operations, member nations may desire to retain even more control of their own national forces than is generally associated with alliance operations, because of distrust, cultural differences and conflicting objectives. This was most evident during DESERT SHIELD/STORM, when a lead command structure was not an acceptable arrangement for the Middle East nations participating in the coalition. Instead the command structure utilized was a 'Combination Command', where the Arab ground forces formed a 'Lead Nation' command structure subordinate to the Joint Force/Theater of Operations Commander (Saudi Arabia) and a 'Parallel Command' to the United States Force Commander (CINCCENT). The allies ground forces consisting of British, French and U.S. were under the tactical control of CINCCENT, and liaison between the two 'Lead Nation' command structures occurred at a Coalition, Coordination, Communications and Integration Center (C3IC). Although this chain-of-command apparently worked during operation DESERT SHIELD/STORM, military commanders must be careful not to adopt this scheme as the archetype.

Joint publication 3-16 (draft), *Joint Doctrine for Multinational Operations*, does not discuss which command structure is best, nor does it offer advantages and disadvantages to each. U.S. joint military doctrine is contradictory on the subject of command structure. "Parallel command is the simplest to establish and often the organization of choice."[10] "Nonetheless, because of the absence of a single commander, the use of a parallel command structure should be avoided if at all possible."[11] This disconnect in doctrine, (albeit *Joint publication 3-16* is still in the draft form), only substantiates the case that commanders responsible for organizing and planning coalition military operations must carefully consider all aspects of the coalition relationship as depicted in the "Commander's Checklist for Multinational Operations."[12]

History has shown that abandoning the principle of unity of command is a dangerous and perhaps catastrophic endeavor against a **formidable** threat. World War I saw the transformation of a command and control structure from 'parallel' to 'lead nation' with a Supreme Allied Commander-in-Chief on the Western Front, General Foch. "The inability of coordination measures, even with a compliant British Commander-in-Chief, Sir Douglas Haig, to cope with the demands of allied action against the rapidly changing situation in the spring of 1918, demonstrated that unity of command was a prerequisite to effective allied war fighting."[13] These lessons learned from World War I were applied extensively in Second World War command structures. "U.S. units were subordinated to British commanders a number of times [and vice-versa], for example in Italy, Normandy, Arnhem, and in the China-Burma-India Theater. This experience made the U.S. military a proponent of coalition warfare and a world leader in its practice."[14]

## Unity of Effort

Unity of Effort has evolved into a **new** Principle of War and has relegated the principle of 'Unity of Command' to a subordinate, subservient role in U.S. joint war fighting doctrine. "Unity of command may not be politically feasible but should be a goal if at all possible. Although important, it is only one of the components of unity of effort."[15]

Critical to achieving unity of effort throughout a MNF is interoperability..."the ability of systems, units or forces to provide services to and accept services from other systems, units or forces...to operate effectively together."[16] "Interoperability is the most essential RSI (Rationalization, Standardization, Interoperability) requirement for multinational operations."[17]

Coalition members exercise national prerogatives and procure or produce unique communication and weapon systems to support their own military requirements. Often little regard is given to compatibility during the procurement process outside national forces, and in most cases the ability to communicate is restricted along service lines or similar unit types. "Many potential coalition partners have information systems that are incapable of communicating with U.S. military systems."[18]

When coalitions are formed, the operational commander has a severe challenge at hand to determine force compatibility and how to achieve the required interoperability to effectively employ the force.

Longstanding alliances, specifically NATO, have adopted a technique for measuring and ensuring interoperability issues are considered during the new military system acquisition phase. The NATO Standardization Agreements (STANAGS) series and associated Memorandums of Understanding "are instruments that must be used to establish

commonality in procedures and equipment."[19] STANAGS recommend by voluntary compliance, alliance compatibility measures that are considered by military command, control, communications, and computer (C4) acquisition specialists and private industry in attempting to plan, provide, and produce new information warfare/weapon devices. This is indicative of the relative strength of an alliance over a coalition.

Several multinational organizations have recently produced favorable results from testing and trials in interoperability. Specifically, the Joint Warrior Interoperability Demonstration (JWID 97) conducted a series of demonstrations supported by multiple national private industry representatives. Although the majority of the testing "...focussed primarily on shore-based command-and-control nodes,"[20] some small tactical victories were achieved. "GEC-Marconi interoperability demonstration (proved) that the UK's Battlefield Artillery Target Engagement System (BATES) can operate effectively with the US Advanced Field Artillery Data System (AFATDS), even at extended range across the Atlantic, to enable coalition collaborative planning to occur pre-deployment."[21] COMBINED ENDEAVOR (CE), is a series of U.S. European Command sponsored exercises planned and executed to identify and document C4 interoperability issues between NATO and Partnership for Peace (PfP) nations. CE has a long-term goal of "...by the year 2002, participating nations will possess the ability to deploy as part of a coalition task force and be interoperable with NATO as well as among themselves."[22] A total of 29 nations participated in CE 98, nine of which were observers only. The "...process resulted in a network of switches from twenty nations connected by radio relay systems from thirteen nations that successfully placed over 4,000 test calls. LAN/WAN tests were successfully completed over this network, as well as over HF radio systems..."[23] Unfortunately, the successes of NATO and CE in achieving

interoperability are only now being realized after years of struggling through poor connectivity. This does not bode well for interoperability issues facing coalition forces today and in the near future.

## The Technology Quandary

U.S. joint doctrine continues to emphasize unity of effort as a solution to the political inability to arrange coalition forces in an acceptable chain-of-command to ensure unity of command. However, arriving at an acceptable level of unity of effort is much easier stated in doctrine than it is to accomplish. Given that the U.S. military is pursuing an arguable 'Revolution in Military Affairs (RMA)' with the development of Network-Centric Warfare (NCW) and the Digitized Battlefield project, what impact will this have on MNF military operations? One author recently surmised that "...if network-centric warfare demands the tremendous pre-conflict investments in data processing that I suspect it does, then the future of coalition warfare looks bleak indeed. Not only will our allies have little to contribute to the come-as-you-are party, they won't even be able to track the course of the conversation."[24]

## Interoperability Options

Several possible courses of action (COA) exist to address the future C2 interoperability issue:

(1) The U.S. government could continue to produce and procure the advanced C2 systems and lease them to the MNF. The advantage of this is complete interoperability. The disadvantages are the cost, surrender of a technological edge by 'leveling the playing field,' and concerns for security. Filters need to be developed to remove highly classified sensitive information and an extensive training program implemented.

(2) Standardize future C2 system procurements and require coalition members to accept the terms of the standardization agreements. The advantage is measured interoperability with coalition members. One disadvantage is that U.S. private industry technological effort may be constrained by a possible unsuitable protocol. Another disadvantage is the number of coalition members is restricted to those capable of producing or purchasing a conforming system.

(3) The U.S. military would act unilaterally and not participate in alliances or coalitions. The advantage is assured C2 interoperability within U.S. joint forces. The disadvantages are that the U.S. can no longer afford to act independently due to limited resources and world opinion. In today's austere fiscal world and downsizing, alliances and coalitions are required to accomplish the military objective and legitimize U.S. actions

(4) Use a modified DESERT SHIELD/STORM approach and conduct centralized planning with all MNF members but assign coalition and/or allied forces in less technologically intensive roles. Segregate the Area of Operations along functional or geographic lines and establish the C3IC to assume the responsibility of communicating and coordinating actions with their representative national forces. Although this option is similar to option three, where by the U.S. forces will execute the most complicated and C2 intensive phase of the operation, coalition forces are still involved in crucial mission oriented combat action. The advantage is that limited interoperability is achieved and all forces are employed in critical missions. The disadvantage is that the U.S. military/compatible allied forces assume the most complicated and risk intensive missions.

(5) Establish a partnership of coalition forces that maintain a common interest in a given geographic area. This pseudo-alliance staff would maintain a permanent presence in

theater and work closely with the U.S. CINC or Combined Joint Task Force staff. This permanent C3IC, possibly under the charter of NATO PfP, would spearhead the force interoperability concerns, develop and test contingency core doctrine, and exercise representative forces.

## Proposed Solution

Insist on unity of command. A single multinational force commander must be responsible for planning and execution of any military operation ranging from Military Operations Other Than War (MOOTW) to war.

"...those whom the United States would be most likely to seek as coalition partners share NATO membership or association with NATO norms through the Partnership for Peace, recent operations, and multinational exercises. These are the ideal conditions under which to develop the mutual understanding and confidence that appealed to senior World War II leaders as the secret of true unity of command exercised through a fully integrated combined (and joint) staff."[25]

The responsibility for executing this 'Lead Nation' command arrangement should fall to the military body most experienced in the theater, and these nations should be identified and incorporated now into Combined-Joint Task Force (CJTF) doctrinal concept. Critical to this solution would be the establishment of standing C3IC's co-located with the regional U.S. Component Commanders and NATO staffs, consisting of competent liaison officers from the regional partner nations. This precludes the extremely reactive 'pick-up game' approach to coalition warfare. The C3IC personnel would be prepared to assume critical staff positions on the assigned MNF commanders' staff. Their mission of achieving consensus, drafting doctrinal procedures, and establishing partner trust and confidence would enhance unity of effort.

General Robert Scales, in a recent article noted, "The practice of using liaison officers as "directed telescopes" to facilitate command and control is almost as old as war itself...ground commanders have relied on carefully selected subordinates to serve as their eyes and ears...provided invaluable information to the commander's immediate staff and others."[26]

With unity of command achieved, a unity of effort would naturally evolve as trust and confidence in the commanders' decisions and actions is understood. The interoperability problem is partially solved by the functionality of the C3IC, whose primary tactical role would be assisting the commander by communicating orders, relaying vital intelligence data, and maintaining a common battle-space 'picture.' "The antidote to the fog and friction of coalition warfare is not technology; it lies in trusted subordinates who can deal effectively with coalition counterparts."[27]

C2 interoperability would be improved significantly by continuing to produce new information systems with a focus and capability to integrate into MNF operations. This problem could possible be solved by pursuing a combination of the technology courses of action two and five discussed previously. The U.S. technological edge would be maintained as long as our private industry is engaged in the standardization process. Coalition forces or regional partners would be required to purchase compatible systems, lease the technology from the system developer or domestically build a compatible system. This ensures that all interests of advancing technology and growth in the private industry sector are preserved. By using STANAGS or an equivalent directive during system development, alliance participants would be able to indigenously manufacture fully compatible, integrated, and interoperable systems. The regional C3IC would evaluate the force to determine what unique capability each partner contributes, pre-plan C2 interoperability, draft contingency doctrine and be responsible for training and exercising the MNF. Information security concerns would be

addressed at the C3IC, where automated filters in a common server would "strip away" sensitive information.

Developing doctrine for doctrine sake would not be a panacea; however, "Coalition interoperability can also benefit from the same steps being taken to improve interoperability among U.S. military forces. These enhancements include management structure, common equipment, common standards, common doctrine, (tactics, techniques and procedures)."[28] Common coalition doctrine is necessary to provide the operational commander with a source and simplified cornerstone on which a consensus may be developed within the MNF.

## Conclusion

Actions to improve interoperability and the ability to share information must be addressed early (as early as the development of military systems). Nations must exchange qualified liaison officers at the earliest opportunity to ensure mutual understanding and unity of effort.

"A benefit of using NATO as the core of coalition operations is the existence of a single recognized chain of command...it is clear to all involved who is running the operation."[29] A Unified or Combined commander should not be expected to rapidly integrate all the 'ad hoc' forces that desire participation in a military operation. The C2 arrangements, including an essential Lead Nation command structure, could easily be devised as a contingency plan by the permanent C3IC "...theater commanders must be prepared to transform joint task forces into combined ones upon direction of higher authority."[30] This C3IC organization should be adequately staffed and prepared to integrate immediately into the CJTF staff if required.

Finally, commanders and their staffs at both the national and multinational level must establish trust and maintain confidence among forces assigned to a particular operation. The time is now, as the U.S. continues to decrease it's military infrastructure and seek new methods to approach the 'New World Order', to develop an acceptable doctrine that enhances unity of effort by achieving a unity of command acceptable both politically and militarily to essential regional partners. This paper has proffered a revolutionary solution to an evolutionary problem.

## Notes

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[8] Joint Pub 3-16, II-1.

[9] Joint Pub 3-0, VI-6-7

[10] Ibid.

[11] Joint Pub 3-16, II-11.

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[13] Anthony J. Rice, "Command and Control in Coalition Warfare: Does History Provide us with Practical Solutions for Today?" (Strategy Research Project, U.S. Army War College, Carlisle Barracks, PA: 1996), 6.

[14] Joint Pub 3-16, B-1.

[15] Joint Doctrine Encyclopedia, 722.

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[23] Ibid., i.

[24] Thomas P. M. Barnett, "The Seven Deadly Sins of Network-Centric Warfare," Proceedings, January 1999, 37.

[25] Anthony J. Rice, "Command and Control: The Essence of Coalition Warfare," Parameters, Spring 1997, 164.

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[27] Ibid., 10.

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